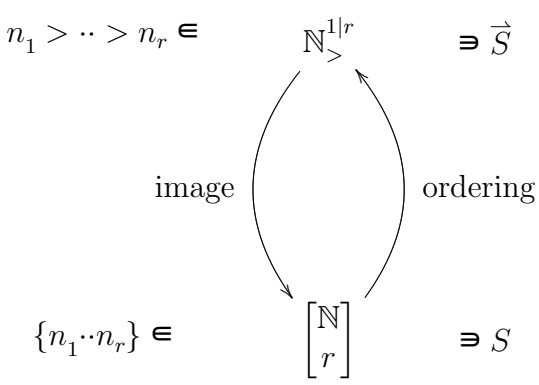
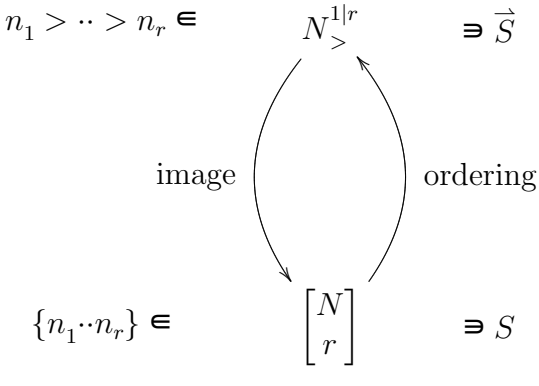
$$N_{>}^{M} = \frac{M \xrightarrow{\curvearrowright} N}{\curvearrowright \text{ streng monoton fallend}}$$

$$\mathbb{N}_{>}^{1|r} = \frac{\underline{n} = n_1 \cdots n_r}{n_1 > n_2 > \cdot\cdot > n_r \geqslant 0}$$



$$S = \{\, i_1 \cdot\cdot i_r \,\} \Longrightarrow \vec{S} = i_1 > \cdot\cdot > i_r$$

restricted $N \subset \mathbb{N}$



$$S = \{\, i_1 \cdot\cdot i_r \,\} \Longrightarrow \vec{S} = i_1 > \cdot\cdot > i_r$$

$$\sharp N_{>}^{1|r} = \begin{bmatrix}\sharp N\\ r\end{bmatrix} : \quad \sharp (1|n)_{>}^{1|r} = \begin{bmatrix}n\\ r\end{bmatrix}$$

$$k + r = 0|k + r- = \{0 \leqslant i < k + r\}$$

$$(k+r)^{1|r}_{>} = \frac{n_1 > \cdots > n_r \geqslant 0}{n_1 < k+r}$$

$$\sharp\,(k+r)^{1|r}_{>} = \{k+r > n_1 > \cdots > n_r \geqslant 0\} = \begin{bmatrix} k+r \\ r \end{bmatrix} = \begin{bmatrix} k+r \\ k \end{bmatrix}$$